REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

Claims 1, 5-9, 11-19, and 22are pending in the application, with claims 1 and 5 having been amended, and claims 2-4, 10, 20, and 21 having been canceled. Entry of these amendments is respectfully requested as it is believed they place the application in condition for allowance or in better condition for appeal.

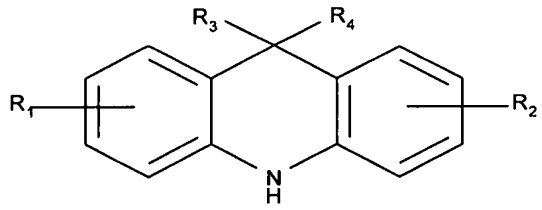
Claims 1, 3, 4, 7-9, and 21 have been rejected under 35 U.S.C. 102(b) as being anticipated by Wheeler et al. (U.S. Patent No. 5,268,394).

It is noted that this ground for rejection was not applied to claim 2. The features of claim 2 have now been incorporated into claim 1 and claims 5-9 are all dependent, either directly or indirectly, upon claim 1 and claim 2 has been canceled. Claims 3, 4, and 21 have also been canceled.

Accordingly, it is requested that the rejection of claims 1, 3, 4, 7-9, and 21 under 35 U.S.C. 102(b) as being anticipated by Wheeler et al. be withdrawn.

Claims 1-9, 11-19, 21, and 22 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Wheeler et al. in view of Deetman (U.S. Patent No. RE37,101) in light of the evidence provided by Downs et al. (U.S. Patent No. 5,310,491).

Wheeler et al. disclose the use of an acridan of Structure (I) as a stabilizer, preferably combined with hindered amine, phenolic, and phosphite stabilizers for stabilizing polyether polyols for polyurethane flexible foams and as stabilizers for the polyglycols, heat transfer fluids, and lubricating additives.



I

R_1, R_2, R_3, and R_4 can be H, C_1-C_{18} alkyl, or C_7-C_{18} aralkyl. R_3 and R_4 can also be aryl, preferably phenyl.

Deetman discloses a fluid composition suitable for use as an aircraft hydraulic fluid. The fluid composition comprises a fire resistant phosphate ester base stock comprising between about 10% and about 100% by weight of a trialkyl phosphate, between about 0% and about 70% by weight of a dialkyl aryl phosphate, and from about 0% to about 25% by weight of an alkyl diaryl phosphate, with the proviso that the sum of the proportionate amount of each base stock component must equal 100%. The alkyl substituents of the trialkyl phosphate, the dialkyl aryl phosphate, and the alkyl diaryl phosphate contain between 3 and 8 carbon atoms and are bonded to the phosphate moiety via a primary carbon. The fluid composition further comprises an acid scavenger, an anti-erosion additive, a viscosity index improver, and an antioxidant. An additive combination comprises a high molecular weight butyl/hexyl methacrylate viscos ity index improver, a perfluoroalkylsulfonate anti-erosion additive, a 3,4-epoxycyclohexanecarboxylate or a diepoxide acid scavenger, a di(alkylphenyl)amine, and a phenolic antioxidant comprising a mixture of a 2,4,6-trialkylphenol and a hindered polyphenol compound selected from the group consisting of bis(3,5-dialkyl-4-hydroxyaryl)methane, 1,3,5-trialkyl-2,4,6-tris(3,5-di-tert-butyl-4-hydroxyaryl)benzene and mixtures thereof. Preferably, the fluid composition further

comprises a benzotriazole derivative as a copper corrosion inhibitor, and a 4,5-dihydroimidazole derivative, as an iron corrosion inhibitor and to enhance the stability of the fluid.

Downs et al. disclose a lubricant composition containing the reaction product of an alkyl-substituted 1,2-dihydroquinoline and a diarylamine as antioxidant.

It is true that Wheeler et al. disclose that acridans can be used as lubricating additives. This has been acknowledged in the present specification. Wheeler et al. also disclose combining the acridans with certain amine stabilizers, phenolic stabilizers, and phosphite stabilizers. However, the patent teaches only the use of acridans that have been *separated* from the diphenylamine employed in their manufacture. The gist of the present invention lies in the discovery that such separation is unnecessary and that useful combinations of acridan and residual alkylated diphenylamine can be employed as stabilizers for lubricants without the manufacturing expense of separating them from the reaction mixture. The present claims stress this point. First, one reacts a mixture of an excess of an alkylated diphenylamine with an aldehyde and a ketone. When all the aldehyde or ketone has been used up in the reaction, there will still be unreacted alkylated diphenylamine left. How much will be left can be predetermined and regulated by the amount of aldehyde or ketone added. It may be a lot or a little depending on the on the desired qualities of the final mixture. One can then use this mixture of acridan and residual alkylated diphenylamine as is, without going to the manufacturing expense of separating the acridan and then adding additional antioxidants. Of course, additional stabilizers, e.g., antioxidants, can, if desired, be added to the unseparated acridan/alkylated diphenylamine composition, and, in fact, in a preferred embodiment, one or

more amine antioxidants, which may be the same as or different from the residual diphenylamine of the composition, and/or hindered phenolic antioxidants are added. It is submitted that these alternatives are clearly specified in the claims of the present application.

The primary reference, as noted above, fails to disclose or suggest the economically desirable benefit of the present invention, i.e., the ability to omit the separation step of the newly formed acridan and the residual alkylated diphenyl amine. On the contrary, Wheeler et al. teaches in column 4 that the crude reaction mixture, which contained diphenylamine, dimethylacridan, isopropyl diphenylamine, and dimers and trimers of various alkylated diphenyl amines was *carefully fractionally vacuum distilled.* Clearly, this procedure would add cost to the product, which, by virtue of the teaching of the present inventors, can now be avoided.

The Examiner has argued that the cost of Applicants' process versus the process of Wheeler cannot be judged. Applicants disagree. Wheeler's starting material is an acridan that has been "carefully fractionally vacuum distilled." The starting material of the present invention is the crude undistilled acridan, which has to be cheaper than the purified material of Wheeler. It goes without saying that in comparing the economics of two processes, other steps in such processes will have definite bearings on the *overall* cost, but it is undeniable that a process using unpurified starting material will always be cheaper than the same process using highly purified material. This is clearly the situation here and is a definite advantage of the present process over any comparable process of the prior art.

None of the secondary references supplement this deficiency of Wheeler et al. as a reference against the patentability of the present invention. Deetman merely discloses that numerous combinations of phenols and amines, one of many of which may be an acridan, can be used as antioxidants. Downs et al. disclose a reaction between a dihydroquinoline and diphenylamine - not the same reaction as that of the present invention - and teach the removal of excess diphenylamine by distillation. See column 5. In no case, is there any hint of the use of unseparated product as the starting material disclosed by the present inventors.

Accordingly, it is requested that the rejection of claims 1-9, 11-19, 21, and 22 under 35 U.S.C. 103(a) as being unpatentable over Wheeler et al. in view of Deetman in light of the evidence provided by Downs et al. be withdrawn.

In view of the foregoing, it is submitted that this application is in condition for allowance and an early Office Action to that end is earnestly solicited.

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